DTS Introduction

- **Welcome!**
  - P.K. Agarwal, Director,

  - Presentation Slides will be available on the DTS website

  - Please complete your Evaluation Surveys!

- **Upcoming DTS Technology Days and Customer Forums**

  - DB2 User Group, June 7
    http://www.dts.ca.gov/calendar/view.asp?key=53&id=1310

  - DTS Mid-Year Rates Customer Forum, June 7
    http://www.dts.ca.gov/calendar/registration/default.asp?key=53&eid=1311

  - DTS Service Catalog Customer Forum, June 28
    http://www.dts.ca.gov/calendar/registration/default.asp?key=53&eid=1316

  - Look for more DTS events coming soon at
    http://www.dts.ca.gov/calendar

Today's Agenda

- **Welcome and Introduction**

- **Network Service**

- **CALNET 2 Service**

- **Portal eServices**

- **Server Consolidation**

- **Disaster Recovery**

- **Questions and Answers**

Department of Technology Services
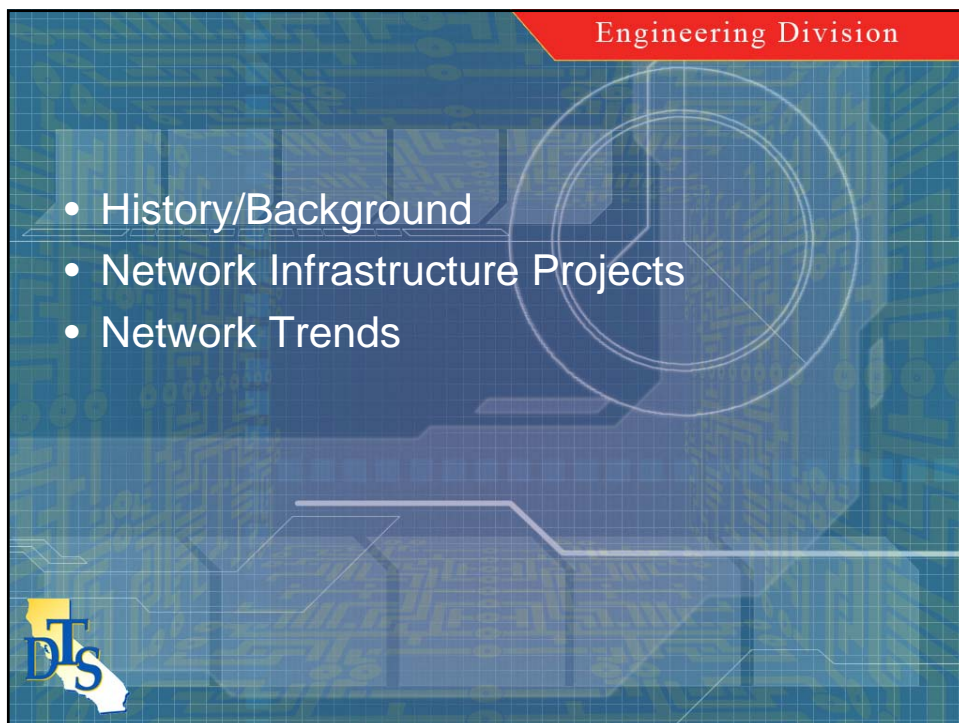

DTS Introduction

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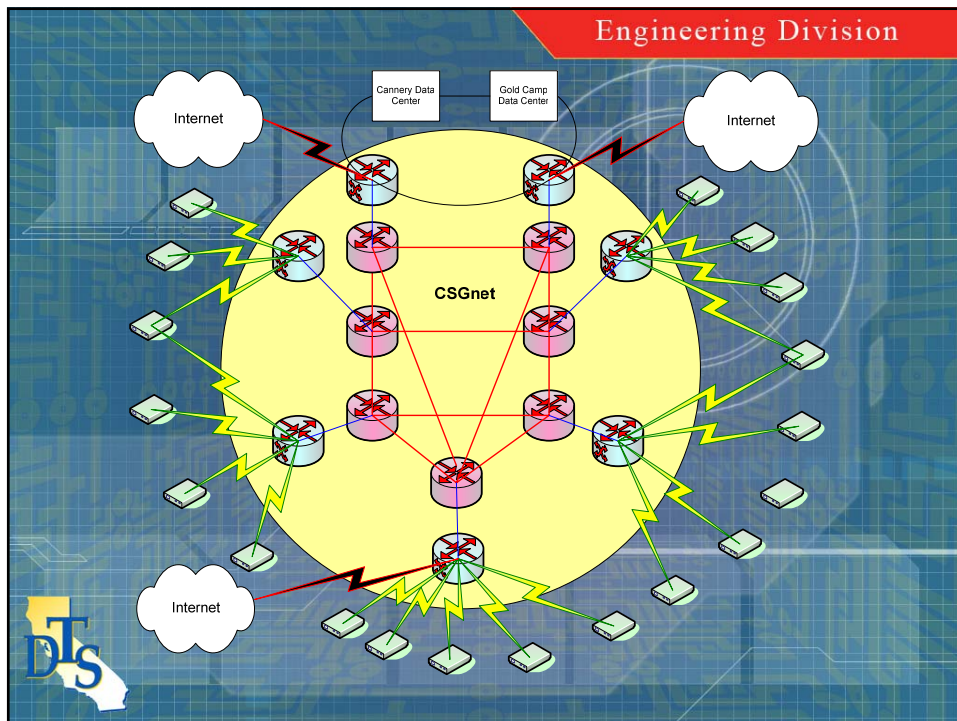## Upcoming DTS Technology Days and Customer Forums

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Department of Technology Services

ENGINEERING

DTS Network
What have we been doing lately?

DIVISION

- History/Background
- Network Infrastructure Projects
- Network Trends

DTS Statewide Network
Total Terabytes
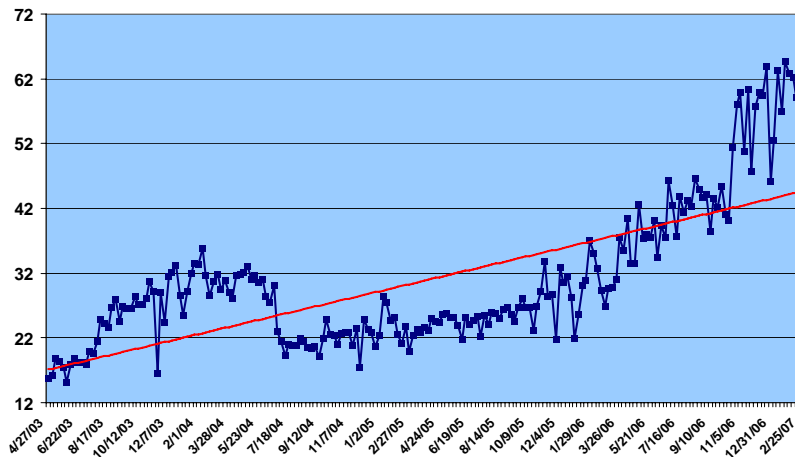
Major Infrastructure Projects
Better, Cheaper, Faster and more Secure

- Distribution Layer
- Single Network (Integration)
  - Remote Access
  - DNS
  - Scalable DMZ
  - Network Mgmt
  - Security
- County/State Simplification

- Sept 2007
- December 2007

- December 2007

Major Infrastructure Projects
Better, Cheaper, Faster and more Secure

- Open Standards Routing
- WAN Capacity Upgrades

- Technology Refresh
- CALNET 2 Services
  - MSA3 (Voice and Data) and MSA 4 (wireless

- December 2009

- June 2008

- June 2008
- December 2012

Network Trends

- WAN Optimization
- Multi-Protocol Label Switching (MPLS)

More Info?

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CALNET 2

Diane Williams
Department of Technology Services
Network and Infrastructure Section

Mark Roese
CALNET II Contract Program Manager
Verizon Business
State of California Account Team

Ed Mosbaugh
Regional Vice President
AT&T

www.CALNET2.ca.gov

State Portal

Bringing you more online services.

Anna Brannen, Deputy Director
Consolidation Management Office

What's a Portal and what does it look like today?

What are the limitations?

- ◆ Not easy to change.
- ◆ Unable to upgrade to latest software versions
- ◆ Does not take advantage of latest technologies.
- ◆ Limited functionality.
- ◆ Overall lack of understanding.
- ◆ Cannot share data between applications.
- ◆ Can not support statewide technology initiatives.
- ◆ Can not support "In-Touch Vision".

What do we do?

- ● Conduct a solutions based procurement.
- ● Acquire a vendor partner to:
  - ◆ Refresh portal infrastructure
  - ◆ Assist departments in developing portal based systems.
- ● Provide a new service offering.

What will be the new service offering?

- Portal Core Platform:
  - Portal infrastructure
  - Search engine
  - Payment engine
  - Web content management service
  - Portal application services

- Development and Implementation:
  - Web application development
  - Web page design
  - Web application integration
  - Migration of web sites / applications to portal platform
  - Web content management deployment
  - Web content management support
  - Contact center services
  - Marketing services
  - Current environment assessment

What are our next steps?

1. Release RFP in June 2007
2. Issue intent to award
3. Submit business plan with proposed rates to Technology Services Board.
4. Begin new services.

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Where can I get more information?

www.eServices.ca.gov

www.dts.ca.gov

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Project Manager

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Server Consolidation Study

State Of California

Steve Rushing
Chief Consolidation Technologist

California State IT Strategic Plan (Nov/06)

- Goal 4 -- Lower Costs and Improve the Security, Reliability, and Performance of the State's IT Infrastructure.
  - Objective 2 – Consolidation of Technology Infrastructure and Services
    - *Action Item3 – "By June 2007, the Director of DTS jointly with the IT Council Technology Services Committee will submit a Server Consolidation Plan to the State CIO and the Technology Services Board."*

Project Objectives

- To Identify Server Consolidation Opportunities
  - Inventory Existing Servers And Their Purpose
  - Estimate Future Server Growth
  - Recommend Feasible Types Of Consolidation For The State
  - Perform Analysis Of Tangible Consolidation Benefits
  - Identify Possible Non-tangible Improvements
  - Identify Consolidation Risks And Issues

Project Approach

- Server Inventory
  - Several Methods
- Online Surveys
  - Departmental Survey (Completed By CIO)
  - Site Specific Surveys (Completed By Site Manager)
- Analysis And Recommendations
  - Growth Estimation
  - Consolidation Options
  - Cost And Value Of Consolidating Servers
  - Risks And Impacts Of Consolidations
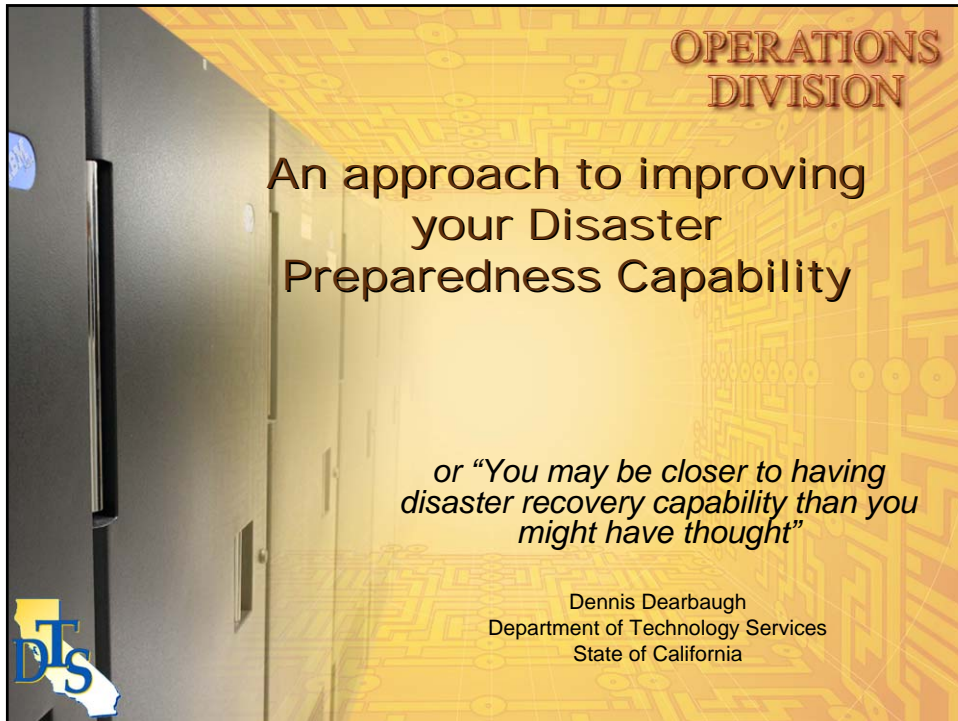 - Prioritization Based On Impact

Project Accomplishments

- Kickoff - State CIO and TSB Sponsorship
- FAQ From DTS To Departments
- Security Review Of All Processes
- Processes And Methodologies Reviewed With ITC Consolidation Work Group
- Met With AIOs
- Online Survey Info Collected
- Server Inventory Data Collected

Underway

- Consolidate Inventory Into Database (At DTS)
- Analyze Inventory Data
- Analyze Survey Information
- Integrate The Analyses And Develop Recommendations
- Draft Report To Clark And AIOs
- Report To TSB (June)

Questions?

- For Additional Information

  - Megan Johnson,
    - Project Manager
    - (916) 739-3310
    - Megan.johnson@dts.ca.gov

  - Steve Rushing
    - Chief Consolidation Technologist
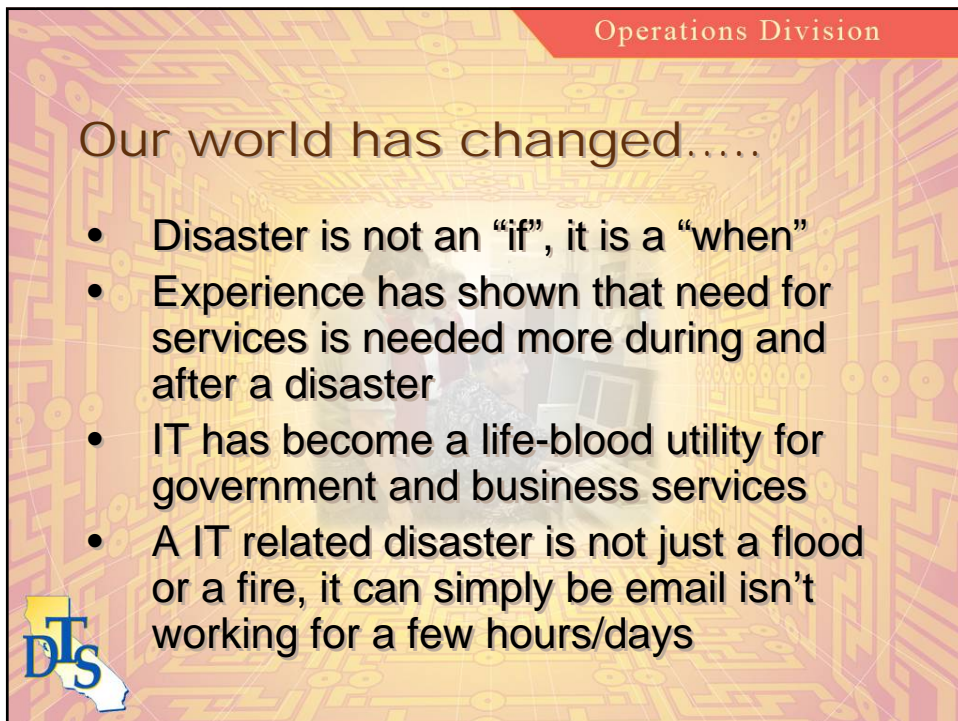   - (916)739-7973
    - Steve.rushing@dts.ca.gov

An approach to improving your Disaster Preparedness Capability

or "You may be closer to having disaster recovery capability than you might have thought"

Dennis Dearbaugh
Department of Technology Services
State of California

OPERATIONS DIVISION

Operations Division

Our world has changed…..

- Disaster is not an "if", it is a "when"
- Experience has shown that need for services is needed more during and after a disaster
- IT has become a life-blood utility for government and business services
- A IT related disaster is not just a flood or a fire, it can simply be email isn't working for a few hours/days

COOP/COG realizations……

- No Program stands alone
- No Service stands alone
- Everyone is expecting their partners and providers to have planned on getting their own stuff back in place
- Only deals with initial recovery, not full restoration of normal operations

If IT is a utility……….

- Then IT should plan its recovery like a utility
- A utility plans for recovery (restoration of service) of all its services regardless of individual customer applications (except as it relates to priorities)
- A utility deploys its infrastructure to deliver its services, but builds it in a way that facilitates recovery/restoration of service

So where does that leave us?????

- The IT environment has become more complex (not just mainframes anymore)
- We have servers and routers and stuff all over the place
- Maybe that complexity gives us opportunity

What can be leveraged???????

- Consolidating Servers….
- Implementing SANS (storage area networks)…..
- Implementing ITIL……
- Designing Applications to be Hardware/OS independent…….
- Refreshing hardware……

Change our paradigm about DR solutions. Rather than a slice at a time, take a look at the whole pie....

- If it is easier (cheaper, less complex) to recover a full service offering (like the mainframe) rather than the thousands of individual applications that run on it.......
- If it is easier (cheaper, more reliable) to replicate all your data to another site, rather than individually backing up and restoring hundreds of thousands of data files.......

Putting this paradigm to work....

- Creation of DTS required us to look at how we could do business better
  - Technology Consolidation
  - Common Procedures/Practices
  - Gaining Efficiencies
  - Customer Solution Deployment

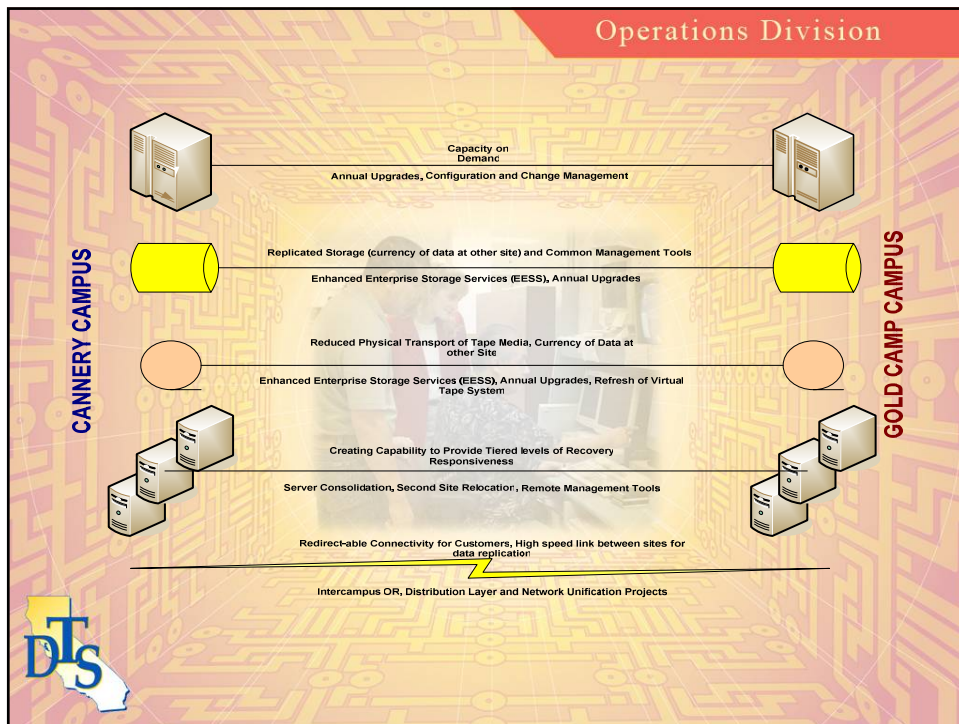## Exploiting our planned efforts to gain DR capabilities……

- Server Consolidation
  - Using leftover servers
  - Using virtual server technology
  - Relocation of servers between sites at time of conversion
- Network Consolidation
  - Incorporating ability to switch network connections between data center sites
- Storage Management Efficiencies
  - Externalizing storage
  - Splitting Virtual Tape Libraries between data center sites to allow automated remote vaulting
  - Standardizing backup/recovery tools and processes

No lack of possibilities…..

- Planned Upgrades/Refreshes
  - Buying storage capable of replication
  - Installing new hardware at alternate site
  - Acquiring Capacity on Demand features
- Moving to new location
  - Need to minimize staffing driving need to build remote management solutions
  - Need to move things so move them to the appropriate site
- New Processing Requests
  - Looking at installing at appropriate sites